





# LILY JO FACTORA

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## Technical Skills

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**Languages:** SageMath, Python, R, C++, HTML, CSS.

**Personal Projects:** Personal website.

**Developer Tools:** VSCode, CoCalc.

## Work Experience

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### Portland Art Museum

Portland, OR

*Archives Work Study Assistant*

*October 2023 - Present*

- Prepared and organized Museum Archives for relocation, safeguarding valuable historical materials and enhancing accessibility for future researchers through cataloging and documentation.

### Reed College

Portland, OR

*Research Assistant on the  $h$ -vector conjecture for graphic matroids*

*Summer 2023*

- Collaborated with other research assistants to investigate the  $h$ -vector conjecture, a well-known problem in matroid theory, a subfield of math at the intersection of combinatorics and graph theory.
- Designed and executed a series of experiments and computational simulations to test conjectures and hypotheses, contributing to the ongoing efforts to solve the problem.
- Gained proficiency in relevant software tools and programming languages to facilitate research tasks.
- Created a well-organized research poster summarizing project findings and procedures, presented at a summer research showcase to effectively convey complex mathematical concepts to a diverse audience.

### Castaway Restaurant

Burbank, CA

*Concierge*

*Summer 2022*

- Demonstrated outstanding customer service with active listening, strong interpersonal skills, and efficiently managed seating using computer software and effective task prioritization.

### Gregory Daniels Fine Arts

Los Angeles, CA

*Warehouse Inventory Specialist*

*Summers of 2018-2021*

- Oversaw cleanliness and organization of work areas while managing inventory to maintain accurate records. Handled digital order processing and troubleshooted shipping/receiving issues.

### Sierra Service Project

Tsaile, AZ; San Diego, CA

*Volunteer*

*Summers of 2017-2020*

- Completed community-based projects to make homes accessible to historically underserved residents.

## Education

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### Reed College

Portland, OR

*BA in Mathematics/Computer Science*

*Graduation: May 2025*

**Activities:** Asian American Pacific Islander Student Union (Board Member), Photography Club

#### Relevant Coursework:

*Mathematics:* Introduction to Probability and Statistics, Calculus, Introduction to Analysis, Discrete Structures, Linear Algebra, Vector Calculus

*Computer Science:* Comp. Sci. I (Python), Comp. Sci. II (C/C++), Algorithms and Data Structures

### Immaculate Heart High School

Los Angeles, CA

*4.20 Cumulative GPA*

*Graduation: June 2021*

**Activities:** Commissioner of Media Productions within the Associated Student Body (2021), Grief Group (Founder, member; 2020-2021), LGBTQ+ Support Group (Board member, member; 2017-2021)

**Academic Awards:** AP Scholar, Top 5 Scholar Athlete (2020), Scholar Athlete (2017-2021)